



## Marsh World

By JOHN THOMAS HOWELL

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Although a salt marsh is not a place one would ordinarily choose for a recreational stroll, it is a favorite haunt of the naturalist because it is the only place where certain plants and animals may be seen. Moreover, students have found that the fauna and flora frequently exhibit notable differences even in adjacent marshes, differences that are due to small variations in environmental conditions or that are perhaps due to the historic or geologic development of the several marsh areas. This fascinating sort of variation, which is well developed in the marshlands of the San Francisco Bay region, gives to the different salt marshes an insular or endemic aspect. So, not only must the enthusiastic naturalist be "queer" once because he visits one salt marsh, but he must be "queer" time and time again, as he explores marsh after marsh.

These were some of my thoughts after our enjoyable and successful bird and plant expedition to the Alameda marshes on Sunday, September 12. On that outing, I obtained my first specimens of *Suaeda californica*, a plant which is not only peculiar to the Alameda area but one that is probably now found nowhere else in the world, and there came to mind other plants that are peculiar to other marsh areas in the Bay region. Some of these plants are quite widespread along the Pacific coast, but in our region they are more or less restricted to certain marshes; in other instances, as is the case with the remarkable suaeda at Alameda, the plants are actually endemic varieties or species peculiar to a restricted marsh.

I have discussed this intriguing problem of distribution with Dr. Robert T. Orr, and from him I learn, just as I suspected, that the distribution of marsh mammals and birds follows the same pattern as is exhibited by the plants. For example, he tells me that the Clapper Rail is more common in marshes around the southern arm of the San Francisco Bay, while the Black Rail is particularly abundant in marshes at the head of Tomales Bay. The Suisun Song Sparrow is almost restricted to the Suisun Marshes, while the Suisun Marsh Wren reaches the Bay area only in the Suisun district. Among mammals, the Petaluma Harvest Mouse can be found only in marshes at the north end of San Francisco Bay, while a distinct but related species, the Red-bellied Harvest Mouse, is confined to marshes bordering the southern arm of the Bay.

So also among plants — the botanist who wishes to see *Suaeda californica* must go to Alameda; *Salicornia Bigelovii* and *Cordylanthus maritimus* as they occur in the Bay area are to be found chiefly in the Marin County marshes; and *Eryngium Harknessii*, *Cirsium hydrophilum*, and *Grindelia paludosa* are confined to the biologically rich Suisun Marshes. So it will be perceived that visiting one of our Bay region marshes is not unlike exploring an island on which plants and animals have been isolated for ages, and in its way it is quite as thrilling. Just "why" these things are so is another "story" — a question which involves a whole series of difficult and perplexing problems.

Of course, most of the plants and animals found in one of our marshes are common to all the marshes of the Bay area; and that is the condition we found in the marsh flora at Alameda. In the lowest area is the Cord-grass, *Spartina foliosa*, and just a little higher the Pickle-weed, *Salicornia pacifica*. Most of the plants, including the salicornia, prefer the saline flats that are inundated only at high tide or even only rarely when there is an extra high tide. In this zone are numerous species of plants, the most characteristic being Salt-grass (*Distichlis spicata*), Arrow-grass (*Triglochin maritima*), Salt-brush (*Atriplex hastata*), Pickle-weed (*Salicornia pacifica*), Sand Spurrey (*Spirularia macrotheca*), Alkali-heather (*Frankenia grandifolia*), California Statice (*Limonium californicum*), Coast Plantain (*Plantago maritima*), Pacific Jaumea (*Jaumea carnosa*), and Marsh Gum-weed (*Grindelia humilis*).

As Mrs. Kelly pointed out, the Clapper Rail (which we heard "clapping" in the morning) commonly nests in the higher ground among the bushes of grindelia; and with detailed study we could probably work out other zoological zonal arrangements in the marsh corresponding to the distribution of particular plants. Certainly the numerous marsh insects would be found to follow closely their host plants. But there again is yet another "story".

What worlds there are to study in a single marsh!



### How It Happens

Skippy wants his fourth-grade class to study birds as their special project this year. But the teacher believes birds would be too difficult for the class. She thinks Indians would be better. Skippy vehemently disagrees. He says they have studied Indians for three years in a row and he is tired of Indians. Besides, you can see birds every place. It is fun to see them and learn about them. He wants to have a bird club. He sees himself the president with a blue button on his shirt. He sees all the other children wearing white buttons on their shirts and dresses. The teacher says "No, it must be Indians." Skippy answers, "We can see birds and we can't see Indians. Anyway, who wants to see Indians when they can see birds?" Skippy is terribly disappointed. He hasn't quite given up hope. He has confided to me that he is still trying to "wear the teacher down".

Some years ago another fourth-grade child of the same school, a girl this time, experienced a wonderful moment. Suddenly, out of the blue sky a Road Runner came. He settled on the chimney of her house. There he stood, wagging his tail up and down, lifting and lowering his crest, uttering cuckoo-noises. The little girl was fascinated. How she wished her class could see it! Could she take some books to school to show the children the Road Runner's picture and tell them about it? So off to school she went, with great enthusiasm. She was going to share her exciting experience with her friends. The Dawson and the Birds of America were heavy, but the children would want to see all the pictures — just one book would not satisfy them. After school the little girl came home with the heavy books. They seemed twice as hard to carry as they had been in the morning. She quietly put them back on the shelf. Her mother, sensing disappointment, asked if the children had enjoyed hearing about the Road Runner. The child replied, "I didn't tell them, Mother. The teacher said we didn't have time, we had so much arithmetic to do."

Do you hope, as I do, that Skippy "wears the teacher down" and becomes the president of the bird club with a blue button on his shirt?

—Laurel Reynolds, Piedmont, California

### Notes at Random

On September 16th birding was excellent along the approaches on both ends of Dumbarton Bridge. Many Eared Grebes, some still in partial breeding plumage, had returned. Pintail ducks were present in good numbers, and also rather large numbers of Shovellers. Thousands of Northern Phalaropes were still there. The usual shore birds and White Pelicans, plus Black Turnstones, were seen. Large numbers of Northern Violet-green Swallows had collected on the telephone wires.

The best time to observe shore birds at the Cliff House is shortly after high tide before the water has receded sufficiently to allow persons to talk on the beach around the projecting rocks. At this time the birds often feed directly below the observer. The light is best in the morning or early afternoon. Conditions were perfect September 25th, when I observed some 24 Black Turnstones, 6 Surf Birds, and one Wandering Tattler.

—Junea W. Kelly, Alameda, California

## Ash-Throated Flycatcher

Additional evidence of the shyness and the deliberate efforts of the Ash-throated Flycatcher (*Myiarchus cinerascens*) to successfully conceal its nesting site are shown by the following facts:

In the April 1943 issue of THE GULL, I set forth the dates of arrival at my ranch near Napa, California, for the years 1941 and 1942, namely, April 27th and April 26th. I also set forth the circumstances which all but misled me into believing that the birds did not occupy in 1942 the 1941 nesting box. This year the birds were first seen on May 2nd.

The repetition of similar tactics in the selection of its 1943 nesting site leaves no doubt as to the deliberate purpose and the ability of this bird to successfully conceal its home. A nesting box fastened to a tall wire fence, not more than thirty feet distant from the front porch, and within plain view of the dining room, was selected as the 1943 nest, without attracting any attention whatsoever. (Bluebirds occupied this box earlier in the season).

Knowing that the pair had arrived, a careful watch was kept to locate the nest, but there was no evidence as to its selection. Last year's box was empty, but profiting by previous experience, and seeing the pair close to the house, I decided on June 24th to examine the fence box. To my agreeable surprise, I found one of the birds incubating, and she refused to leave.

Comparing the location of the two nesting sites — the first in the oak tree and the second on the wire fence — one will appreciate the adroitness of these birds in concealing their selection. The tree is about one hundred yards from the house, with the box visible from there, but from all other directions the limbs and leaves prevent detection. On the wire fence the box is visible from all directions and about thirty feet from the front porch and dining room window. Notwithstanding these facts, it was only previous experience, a knowledge of their shyness and desire to conceal their nest that enabled me to finally locate this year's nest.

—Joseph J. Webb, San Francisco, California

## Eustace Lowell Sumner

There died at Peralta Hospital, Oakland, on Friday, October 1, 1943, Eustace Lowell Sumner, Sr. For most of us, acquaintance with Mr. Sumner began when he returned thirteen years ago to his boyhood home in the Bay region and took up the avocation of bird-banding, writing of his experiences in "The Condor", "News of the Bird-Banders" and in "The Gull". These chronicles were concerned largely with the results of his trapping activities in Strawberry Canyon, on the Berkeley campus of the University of California. At the Hastings Natural History Reservation in Monterey County, where he also banded, he was especially interested in recording the migratory movements of Golden-crowned Sparrows. We who knew him well will long remember his many acts of thoughtful kindness to other bird students and the quick spark of his keen humor. Mr. Sumner is survived by a son, Eustace Lowell Sumner, Jr., a daughter, Mrs. Henri L. Albee of Sacramento, and a brother, Francis B. Sumner of La Jolla.

—Hilda W. Grinnell, Berkeley, California

## September Field Trip

The September Field Trip was taken to Alameda on Sunday, the 12th. The weather was perfect and visibility excellent. High tide at Ft. Point was 5.1 feet at 11:28 a.m. PWT. The party met at Liberty and Fernside at 1:30 p.m. and proceeded to the foot of Liberty Street to await the arrival of the birds. From here the group continued along the shore at Fernside and later walked to Otis Drive and Bay Farm Island Bridge.

Twenty-five species were observed:

American Egret	Dowitcher	Forster Tern
Black-crowned Night Heron	Western Sandpiper	Anna Hummingbird
Sparrow Hawk	Godwit	Say Phoebe
Clapper Rail	Sanderling	Shrike
Semi-palmated Plover	Western Gull	House Sparrow
Killdeer	California Gull	Brewer Blackbird
Black-bellied Plover	Ring-billed Gull	House Finch
Willet	Bonaparte Gull	Savannah Sparrow
Least Sandpiper		

Members present were: Mr. and Mrs. Kilham; Mesdames Austin, Bozant, Dickman, Grinnell, Kelly, Kibbe; Misses Ball, Barry, Berg, Blake, Cohen, Fay, Kirk, MacIver, Papina, Rinehart, Roscoe, Stanton, Werner, Young; Messrs. Cain, Fischer, Leffler. Some 45 guests attended, including members of the Natural Science Section of the Sierra Club and Boy Scouts under the leadership of Mr. Cain.

—Junea W. Kelly, Leader and Historian



## Audubon Notes

**OCTOBER MEETING:** The regular meeting will be held on Thursday, October 14th, at 8 p.m., in the Assembly Room, San Francisco Public Library, Larkin and McAllister Streets, San Francisco.

It is our good fortune that Mr. Harold Kirker will be in San Francisco on our meeting date and has promised to tell us of his experiences since he left here more than a year ago. He spent some time in the New England states and has been in training in the Rocky Mountains as a ski-trooper. He will have much of interest to give us regarding birds and army life in the high places.

Members may bring guests.

**OCTOBER FIELD TRIP** will be taken on Sunday, October 17th, to Lake Merced, San Francisco. Take "L" car on Market Street and get off at Fleishhacker Pool. Party will meet at 9:30 a.m. Bring luncheon.

**SEPTEMBER MEETING:** The 312th meeting was held on the 9th in the Whitcomb Hotel, San Francisco, the regular meeting place in the Public Library being closed on account of Admission Day. President Mrs. Harold C. Austin presided.

Mrs. Kelly, speaking on "Birds and Their Habitats", stressed the point that if we are

familiar with the food and nesting habits of any bird, we will know where to look for it. The Wren-tits like our chaparral-covered hills, the Steller Jays the evergreen trees, the Evening Grosbeaks the box elders. Cliff Swallows and Phoebe's must have suitable mud for their nests, and therefore are to be found near streams or ponds where it is obtainable. Look for Snowy Plovers on the sandy beach, and for Sandpipers on the sand and on the muddier terrain. Sanderlings relish the food that the water brings in. Turnstones consider the organisms on the rocks along the shore the best kind of nourishment. For nesting, Pigeon Guillemots must have a ledge on a steep cliff with deep water below, as the young are not capable of sustained flight.

Mrs. Kelly spoke of the three distinct habitats which she was able to observe at Calaveras Big Trees this past summer: In the trees bordering the meadow she found the Wood Peewees and the Olive-sided Flycatchers. On the brush-covered slopes Fox Sparrows and Macgillivray Warblers were in evidence. In the Big Trees were Winter Wrens, Juncos, Pileated Woodpeckers, Nuthatches, and Hermit Thrushes. Each morning she was made aware of the birds of these various habitats by their dawn choruses.

## Observations

Edited by Junea W. Kelly

The following observations have been reported:

Allen Hummingbird, Aug. 31, near Santa Rosa; Harris Woodpecker, Sept. 9, Larkspur; Mary L. Courtright.

Florida Gallinule, Sept. 7 and 9, Middle Lake, Golden Gate Park; Laura Stephens. (Observed on Sept. 25 on the lake by J.W.K.)

Western Tanager, Sept. 4, at 2736 Lyon St., San Francisco; Joseph J. Webb.

Black-throated Warbler, Sept. 2, near Pleasanton; Orange-crowned Warbler, Sept. 4, Alameda; Sept. 25, Golden Gate Park; Yellow Warbler, Sept. 18, Berkeley Campus; Sept. 25, Golden Gate Park; Yellow Warbler, Sept. 18, Berkeley Campus; Sept. 25, Golden Gate Park; Warbling Vireo, Sept. 23, Alameda; Western Flycatcher, Sept. 25, Golden Gate Park; Red-breasted Nuthatch, Sept. 18 and 22, Berkeley Campus; Junea W. Kelly.

## Audubon Association of the Pacific

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### For the Study and the Protection of Birds

President.....	Mrs. Harold C. Austin.....	541 Boulevard Way, Piedmont 10
Corresponding Secretary.....	Mr. Joseph J. Webb.....	519 California St., San Francisco 4
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Assembly Room, San Francisco Public Library, Larkin and McAllister Streets, San Francisco.

Membership dues, payable January 1st, \$3.00 per year.

Student memberships, \$1.50 per year.

Life memberships, \$50.00.

Members are responsible for dues until written notice of resignation is received by Treasurer.